

POST 90" 920T8860

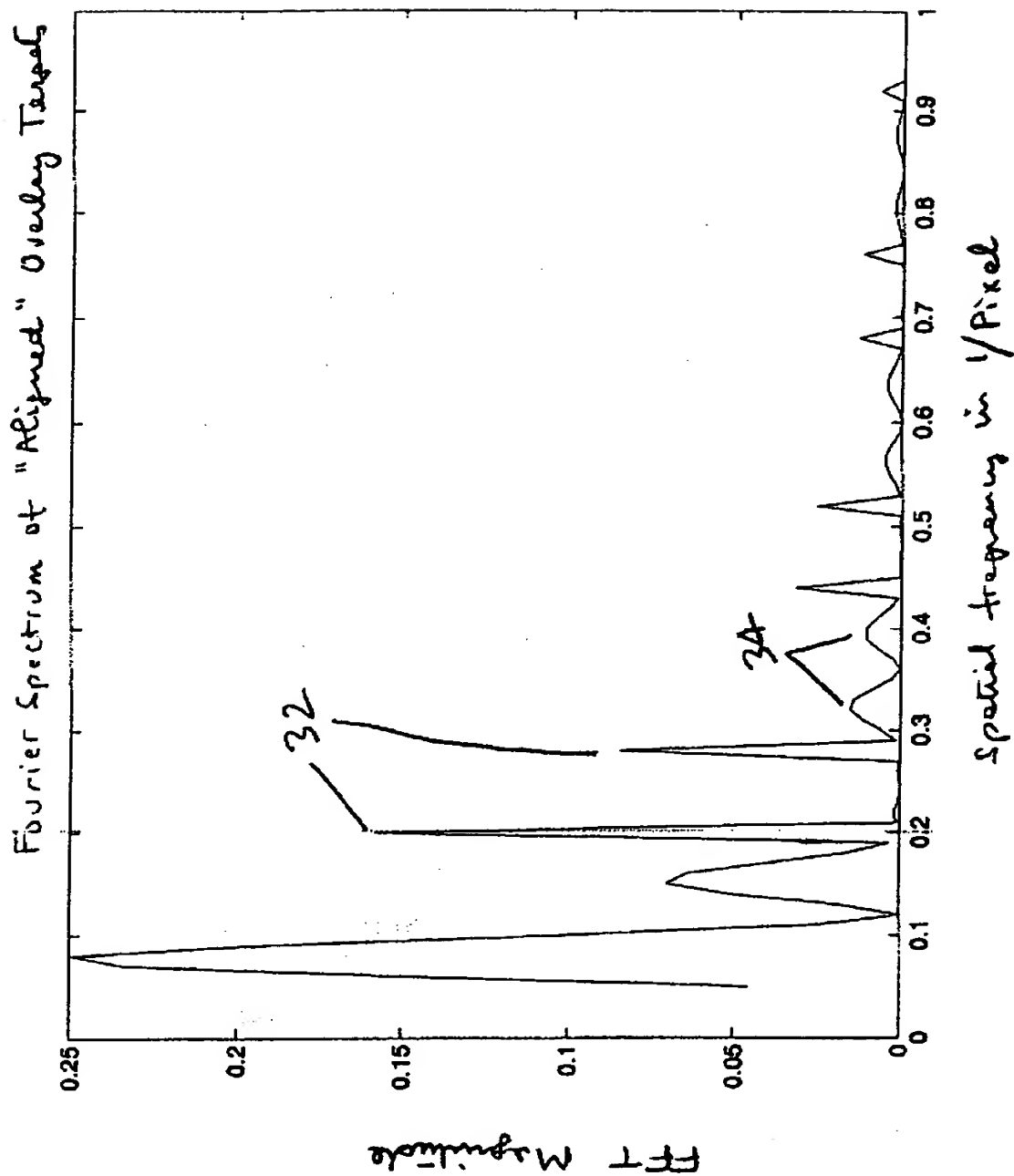
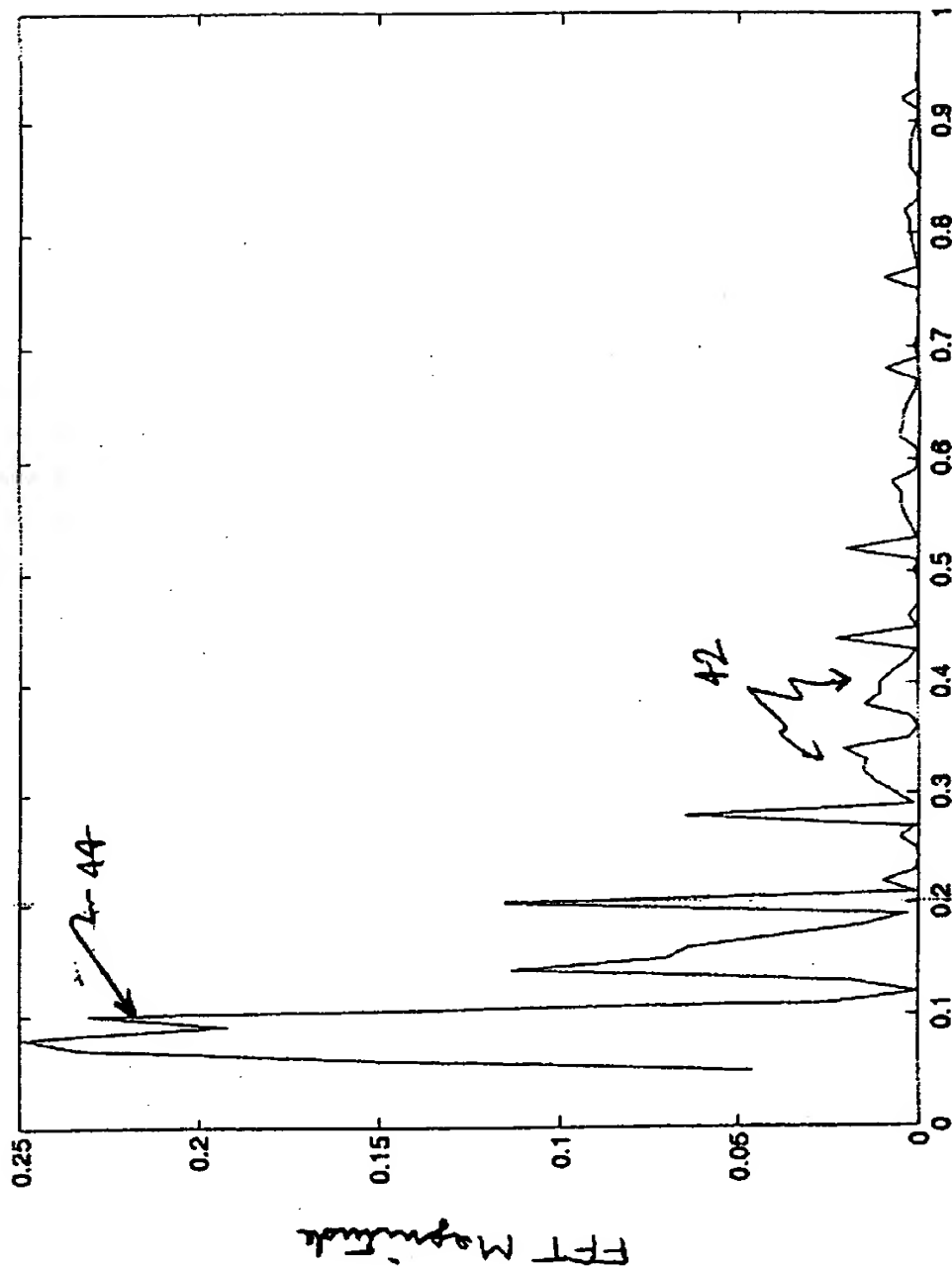


FIG. 3

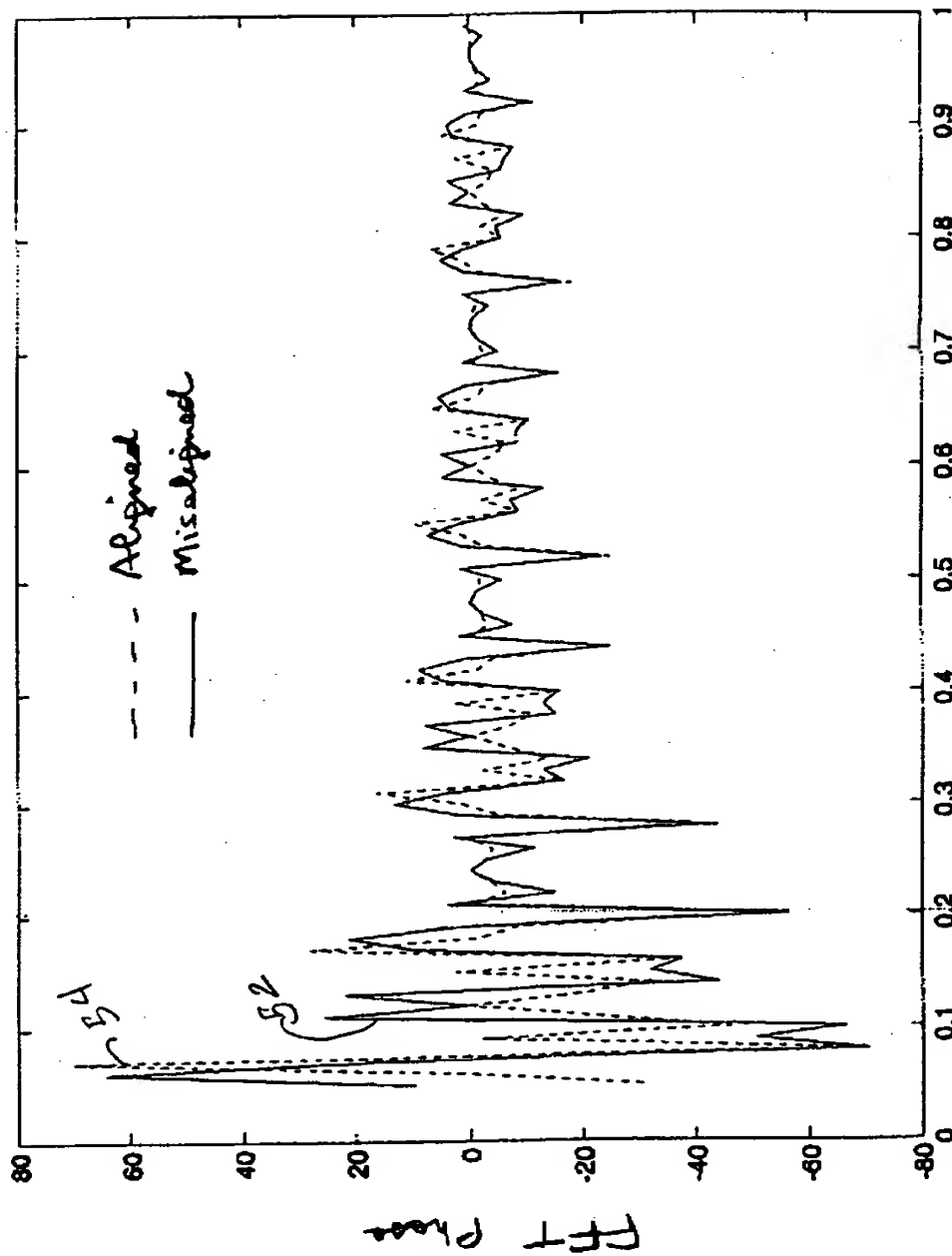
Fourier Spectrum of "Misaligned" Overlay Targets



Spatial frequency in 1/Pixel

Fig. 4

Fourier Spectrum of "Aligned" and "Misaligned" Overlay Targets



Spatial Frequency in 1/pixel

FIG. 5

FIG. 6 SCHEMATIC OF MEASUREMENT APPARATUS

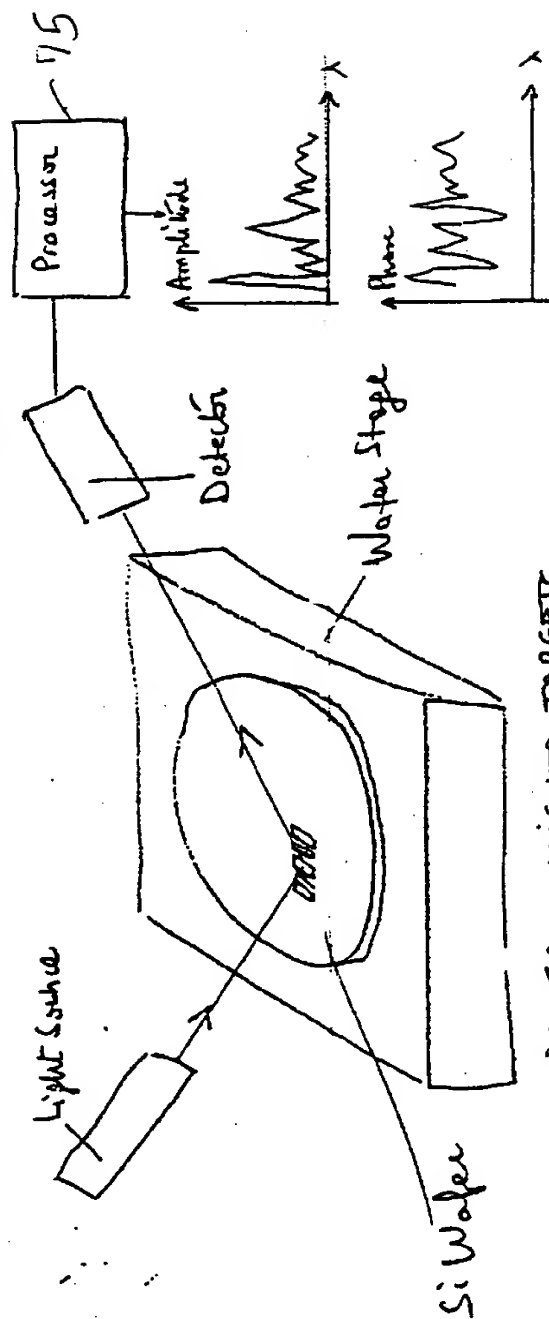


FIG. 6A : ALIGNED TARGET

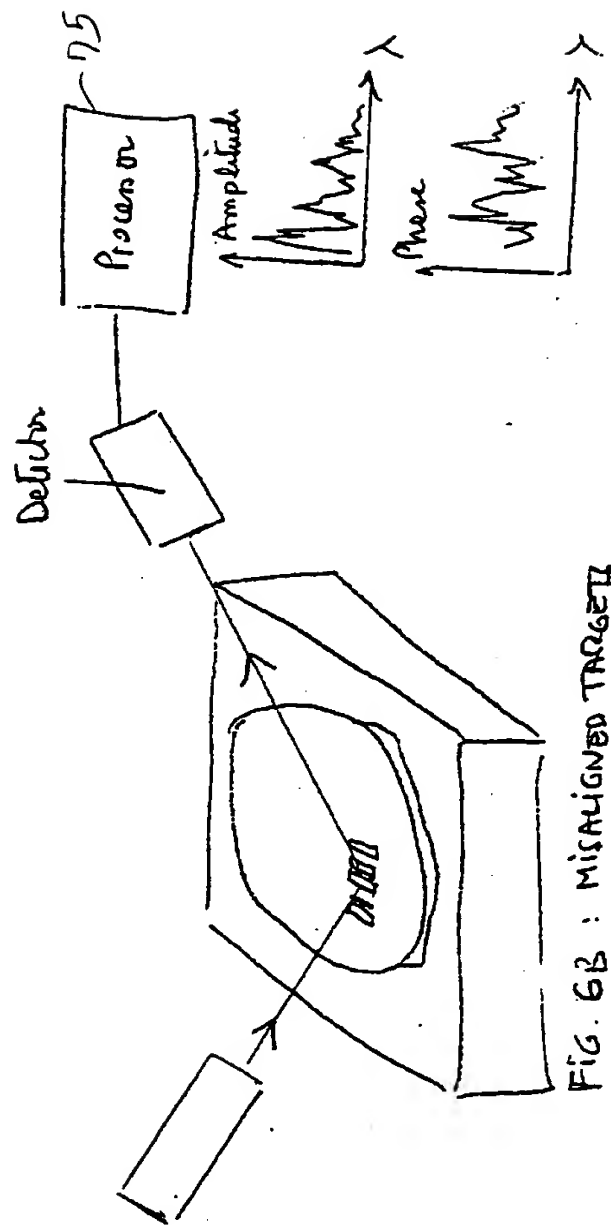
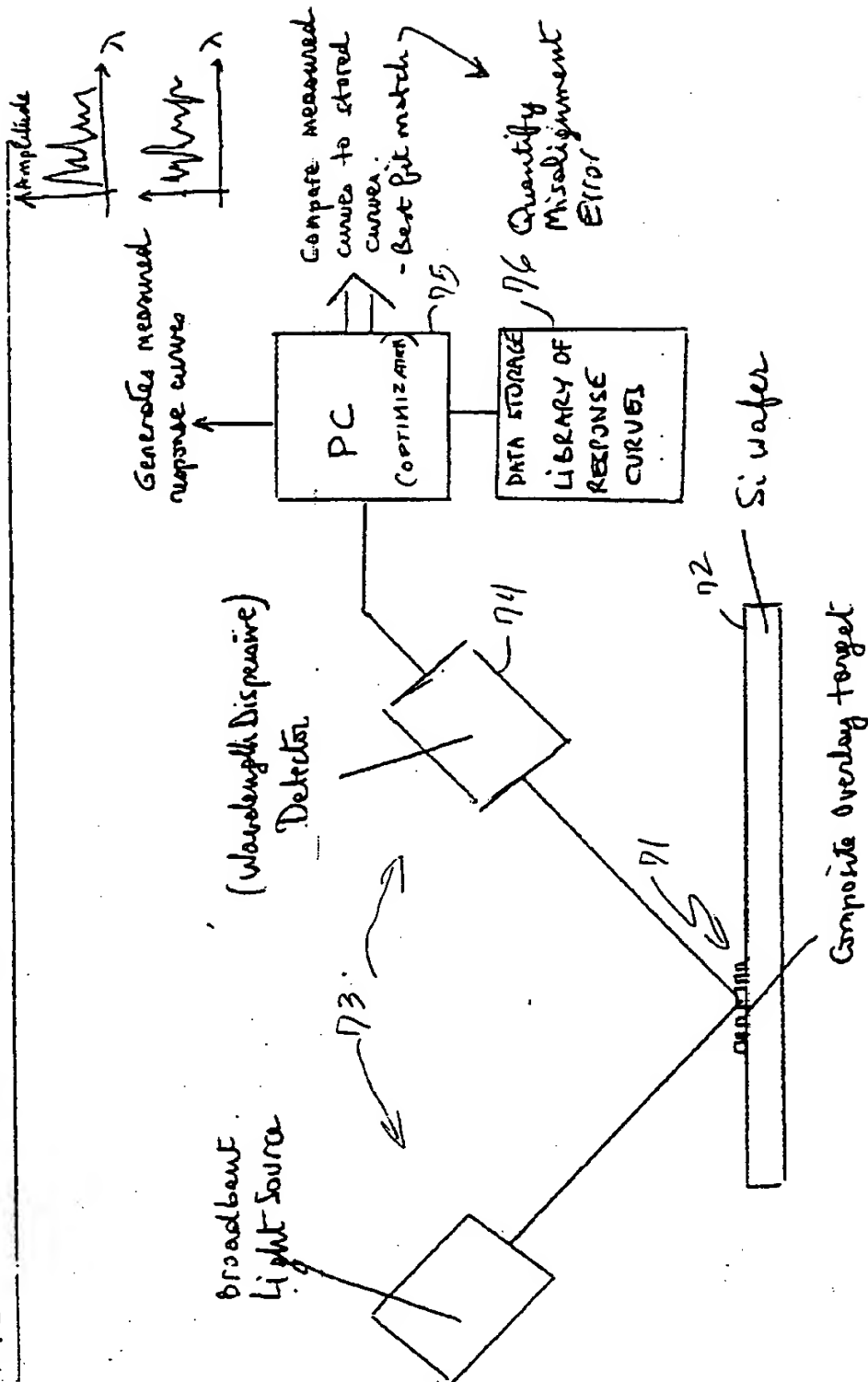


FIG. 6B : MISALIGNED TARGET

FIG. 7 PROCESS FLOW CHART FOR MEASURING OVERLAY ERROR



# Applicability to Future Technology

	Feature in 1997, 250nm	Feature in 2006, 100nm
CD	250nm	100nm
CD <sub>3<math>\sigma</math></sub>	230, 250, 270nm	93, 100, 107nm
thickness	800nm	400nm

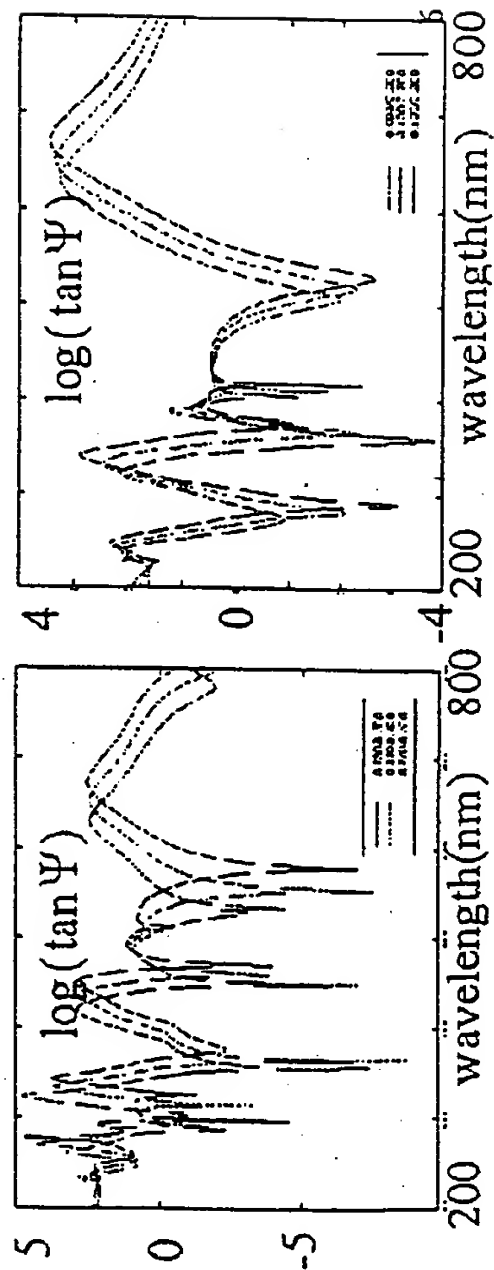


FIGURE 8